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# ASPARAGUS Its Care & Cultivation

T. R. PENDER Williston, S. C.

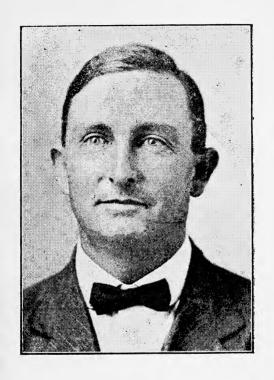


PRICE LIST OF
DEPENDABLE CROWNS
(ROOTS) AND SEED
"Mary Washington" Rust
Resistant

The Ideal Asparagus

D. W. Smeemaker





Talkuler

#### INTRODUCTORY

With the coming of the boll weevil our farmers began to look for some other crop as a substitute for part of their cotton crop. As asparagus had been one of our staple money crops for a long time, naturally they turned their attention to asparagus, which has created an increasing demand for the best varieties of asparagus seed and crowns. For ten years I have tried to supply this demand for asparagus crowns and seed, although I have increased my out put for asparagus crowns each year, I have never been able to supply the demand for good crowns. As a result of the many inquiries I receive, as to the best varieties, where the seed and crowns can be obtained, how to plant, cultivate, and harvest this crop I have written this little booklet.

While I am prepared and willing to answer these questions, fully, I feel that considerable time will be saved, and my customers interest better served, by putting in book form such information and suggestions that I have found through my tewnty years experience with asparagus. That is the purpose of this little booklet which I have written as briefly and concisely as possible according to numerous inquiries I receive.

I want to thank my many old customers for their most liberal patronage in the past and to assure them

as well as all new customers that they shall have the best available in varieties and seed.

T. R. PENDER, varieties and quality of asparagus

Williston, S. C.

Reference: Bank of Williston. Farmers and Merchants Bank. Bradstreet.

# ASPARAGUS—ITS CARE AND CULTIVATION.

Asparagus is one of the most delicious, the surest, and earliest product of the truck farmer or gardener. Its position among other vegetables is unique, and when once planted lasts almost a life time. It may be prepared for use in a great variety of ways and may be canned or dried so as to be available at any time of the year, and yet in the majority of gardens it is almost unknown. The principal reason for this neglect is based on the erroneous idea that asparagus culture requires unusual skill, expense and hard work. While this was true, in a measure, under old time rules, modern methods have simplified every detail connected with the cultivation of asparagus as to make it not necessarily more expensive and laborious than any other garden or truck crop.

This original habitat of the edible asparagus is not positively known, as it is found naturalized throughout Europe as well as in nearly all parts of the civilized world. How long the plant was used as a vegetable or as a medicine is likewise unknown, but that it was known and highly prized by the Romans at least two centuries before the Christian era is historically recorded.

It is historically recorded that the Romans and English, as well as others, used the asparagus roots, sprouts and seeds as medicine, and it was as highly esteemed as ginsing is by the Chinese of this day.

All who have eaten asparagus agree that it is very easily digested and is very healthful. Some who have kidney trouble claim to have been benefitted by eating asparagus.

In presenting this little pamphlet, it is my desire to bring to you the facts about asparagus just as they are. There is no truer saying than that there are two sides to every question, and it is my intention to tell just what will make a success and failure with asparagus.

The writer has had 20 years' experience with asparagus and learned some things about this valuable crop. However, I realize there is more for me to learn. Possibly you have heard that asparagus is a very valuable crop, and all that you have to do is to get some roots or crowns, as they are sometimes called, plant them out and in about three years go to your asparagus field every spring and get rich cutting asparagus. This is not the case, however; but I will say, without fear of contradiction. that asparagus is a better money crop than cotton before boll weevil times. and is just as staple, if not more so, than cotton before boll weevil times. and there is no more prospect of overproduction of asparagus than there is of cotton.

On this and the following pages it is my desire to give you my way of cultivating and harvesting this valuable crop; also of others who have made much success with this crop.

I want to ask you to take enough of your valuable time to read this and the following pages and see what others are doing with asparagus, and if your land is suitable and you take the same care you can make the same success. If there is anything at any time that you do not understand, write me and I will be glad to answer any question to the best of my ability, free of any charge whatever.

I have been growing asparagus roots for sale for the past ten years, and although I have increased my output each year, I have never been able to supply the demand.

After seeing my crowns and the price of same, you will be surprised to know that crowns of this quality can be sold at such a low price. This is made possible by the quantity of crowns I grow.

My crowns are grown on land that has practically no grass seed left on the land the year before. It is almost impossible to grow asparagus crowns on grassy lands, as the grass has to be taken out by hand and is a very tedious and expensive proposition. The seed are planted by especially made planters in order to get the seed spaced properly, so as to produce all uniform crowns. All my crowns are extra large one-year old, which is far better than two-year old. This question has long been settled by all authorities that a good, strong

one-year old crown is the best. I grow asparagus myself and I do not send out any crowns that are not large enough or that I would not plant myself.

If you are interested in asparagus I will be glad to have you come and look at my crowns and see just what you are getting, if you do not live too far away. Visitors are always welcome except Sundays and holidays. If after reading these few pages you have suitable land for asparagus and want to plant a acres to this valuable crop, I will be glad to book your order on a deposit of 20 per cent., balance to be paid before shipment is made or balance will be shipped C. O. D. No crowns shipped C. O. D. unless 20 per cent. of the amount of the order has been paid in advance. Remittances should be made by check, express or postoffice money orders.

Let me say here that I want to thank my many old customers for the most liberal patronage they have given me in the past, and I want to assure them, as well as all new customers, that all orders entrusted to me will have my prompt and personal attention. All orders filled in the same rotation as they are received. All crowns are shipped by express collect, unless otherwise specified. on large orders it is all However, right to ship by freight if crowns will arrive within a week or ten days. It is best not to keep them out longer than this. My responsibility ceases when crowns are delivered to transportation company in good order. Express receipt or bill of lading mailed for each shipment. Should there be shortage, in any way, all claims for same must be made in one week after crowns are received.

Honesty and square dealing first, last and all the time, is my policy, so don't hesitate in sending me your orders, as you can be assured of a square deal. Sample of crowns sent on request. See bank reference elsewhere. Space will not permit me to give testimonials from satisfied customers.

Yours very truly,

T. R. PENDER.

Williston, S. C.

### Suitable Land for Asparagus.

Asparagus grows well in a variety of soils, much more so than any other crop. However, a rich sandy loam is much better; soil that is well drained and does not form a hard crust after each rain, a soil that is quick to grow off any other crop and that warms up quickly in the spring. Never plant asparagus in stiff clay land or in a stiff bottom. Some may tell you that poor sandy land is the best for asparagus. This is true in a sense if you have no rich sandy land. You have to make the poor land rich before you make any money on asparagus, and for this reason it is best to select a few acres of the best rich sandy, well drained land

that you have, as asparagus will be your best money crop if you give it the proper care. Never plant as-paragus in land that has stumps, as you don't want to be plowing around stumps for twenty years or longer and losing that much land. A land that has a little slope and on which the rows can be run East and West is best, because rows run in this direction get the benefit of all the sun, whereas if they were run in the other direction part of the bed would be in the shade in the morning, part in the evening. A land with a South slope and one that is protected from the cold spring winds will make the asparagus or "grass," as it is often called, come up earlier. This is one reason why stable manure is so valuable in growing grass; it seems to have a certain amount of warmth about it.

### Time to Plant Asparagus.

This should be done during the dormant season, December, January or February, while January seems to be the best month for this section. With a few warm days the crowns begin to sprout. Crowns should be planted by the time the first crowns begin to sprout or sooner.

# The Distance Apart to Plant Asparagus.

This is another big question and is some what up to the man that plants asparagus as to what kind of asparagus he wants to grow and how long he wants his bed to last. Let me say at this time that there is no set rules than can govern all section that grow asparagus, as soil, climatic condition, etc. vary in different sections. I am giving methods used generally in asparagus growing section of the southern states. I plant asparagus in rows six and one half to seven feet wide and about 20 inches in drill. Planted this way about 3500 crowns will plant an acre. Asparagus planted in this way will not last over fifteen or eighteen years, but will give more asparagus for the first several years.

### Planting Asparagus.

Land should be well broken and all vegetation well harrowed in. Lay off rows with medium size shovel plow. Take two-horse turn plow and make one round to each row, running in the edge of the shovel plow furrow, leaving a balk about six inches wide. Then scatter about ten tons of compost and about 1500 pounds of high grade fertilizer in the furrows made by the two horse plow and on the balk, then throw out this balk with a middle buster or large round point plow, this mixes the soil with fertilizer and compost and the row is then ready to be planted. A good plan is to get a man to run this last furrow makes short steps about the distance you want to plant the crowns and drop one crown between every track. Crowns should be planted in this furrow with the top turned up, and covered about two inches deep with the foot or with plow of some kind. If crowns are planted top side down it will turn and come all right, but it is best to plant them same as they were before being dug. You can tell the top by the old top that has rotted off. The bottom of the furrow where crowns are planted should be about nine inches below a level of the land.

### Cultivating Asparagus

As soon as the asparagus comes up to a good stand and is large enough to cultivate it should be cultivated regularly until the land is level grad-ually working a little soil around the plants at each plowing. Frequent and shallow cultivation should be kept up until July. A row of peas or some kind of good beans might be planted in the middles as a soil builder, but do not plant early enough to over run the asparagus. Never plant running velvet beans in asparagus, and by all means keep the field free from weeds and grass. Some of the most successful growers do not plant anything in their asparagus middles. There is a question as to whether this row of soil builder will do more harm than good. I advise planting a row of peas or beans, which will make lots of vegetation on the land, and when heavy applications of fertilizer are used it will go into this vegetation and hold the fertilizer until the plants can use it up. Otherwise the

heavy rains may wash it away. The second year the old top should be cut and harrowed in, and the middles well broken, but not deep enough to break many of the main feed roots, generally about five inches deep. should be made on the crowns about twelve inches high, with a riding disk cultivator, and freshened about every three weeks during the cutting season. Middles should have several shallow cultivations during cutting season also. When the cutting season is over the bed should be plowed down, followed by frequent shallow cultivation, and should be kept free from weeds and grass. The asparagus fields should be cultivated afterwards same as the second year.

### Fertilizing.

This is a very important matter. From the third year on it will pay to use from one to three tons of high grade commercial fertilizer per acre as well as a liberal amount of compost. I advise the fertilizer and compost being broadcast and immediately harrowed in to the soil, while lots of the best growers put fertilizer both sides of the row. We all agree it pays to fertilize corn and cottonwhen we make extra bushel or pounds we get pay for the extra amount, not so with asparagus, with increased yields in asparagus through heavy fertilization we have increased quantity and increased quality, and increase in price, an average bunch of choice asparagus has 52 sprigs, with an av-

erage price of about \$1.25 per crate, an average bunch of fancy about 37 sprigs, with an average price per crate of \$3.50 and an average bunch of collosal of 27 sprigs with and average price per crate of about \$4.25. Suppose the crate of choice asparagus with 52 sprigs per bunch had been large enough to make collosal, we would have had two crates of asparagus at \$4.25 per crate or \$8.50 instead of one crate of choice at \$1.25 per crate. Then the expense of gathering one crate of collosal asparagus is about half that of a crate of choice So you can readily see that it pays to fertilize asparagus well. Most of our growers use an 8-4-4 or 7-5-5 fertilizer and have gotten good results from same. Wе about 500 pounds of kanit per acre about June. About half the amount of fertilizer should be used in February, and balance when the cutting season is over. Different soils require different kinds of fertilizers, study your soils and try and find which mixtures are best, and write your agricultural colleges and U.S. Department of agriculture for bulletin No. 829 on asparagus and you will soon find what mixture suits your soil best, remembering that quantity is very important. I know of one grower who has been cutting over \$400.00 per acre from his paragus field for several years. uses a little over two tons per acre and broadcasts land with compost.

### Harvesting Asparagus.

Asparagus in this section begins to come up about March 15 season last for about six weeks. asparagus is cut with a chisel like knife about an inch and a half wide and about eighteen inches long. There are many kinds of asparagus knives on the market but I find that one made by a local blacksmith from an old buggy spring is the best that I have ever used. The part of the knife helps the operator to prize the springs loose from the crown. After the asparagus is cut it is placed in baskets or boxes and hauled to the packing house in wheel borrows, slides or wagons. It is then placed on a large table where it is graded. The choice or smallest grade is anything under on half inch in diameter at the largest place; The next grade is fancy or any thing from one half to three fourths of an inch in diameter at the largest place and the largest grade or collosal is from three fourths of an inch in diameter or larger. After being graded it is packed in bunches of about two pounds and cut eight and one half inches long. It is then packed in crates of twelve bunches each. using a wet moss about one deep in bottom of crate. I use and recommend a waterproof paper placed in the bottom of the crate with the edges turned up, this forms a pan like form which holds the surplus water until the asparagus can use it up. If this paper was not used,

this water would go to waste. This paper can be gotten from the Angier corporation at Farmingham, Mass., at about two cents for enough for one crate, by using this paper the asparagus arrives on the market in a fresh looking condition and I believe this will often make it sell for twenty-five cents per crate more. asparagus is tied with tie grass, or red tape. The tape is generally used as it makes a very neat looking bunch. To obtain the best prices for asparagus, great care should be taken to see that the asparagus is properly graded and packed. In fact this should be perfect, which is very hard to do. If we expect to get the highest prices the pack must come up to what we mark the crate on the outside.

The cutting, grading and packing is done generally by women and children, at an average price of about ten cents per hour. With average labor and average quality of asparagus the cost of putting up a crate of asparagus is about forty-five cents per crate, not including the price of the crate which is a rout fifteen cents. With good help and good asparagus the cost will be less per crate, while with inferior help and smaller asparagus the cost will be more.

With average asparagus one hand can take care of one acre of asparagus per day.

I do not advise planting over about three acres of asparagus to each one horse farm. Generally there is enough labor to each one horse farm to take care of two to three acres of asparagus, and not interfere with the rest of the farm. The asparagus season is about over before there is any cotton to be chopped.

To make a success with asparagus as I see it there are three things necessary. Grow good asparagus (which can easily be done by good cultivation, suitable land, and heavy fertilization.) Put up a neat package, and be sure you have on the inside, the same quality that you stamp on the out side, and have a cooperative marketing association to handle the asparagus so as to give equal distribution.

The trade generally calls for green asparagus, while about ten per cent. is cut white. White asparagus is cut just as it comes through, while to grow green grass, it must stay on the bed until it is five inches above the ground. All of that portion of asparagus that is above the ground is green and very tender.

### Varieties and disease.

The only enemy that the asparagus has is the asparagus beetle and rust. The asparagus beetle is a dark colored bug about one inch long that eats holes in the sprigs after they come up. The asparagus beetle has done very little damage in the southern states, but has given a little trouble in some sections in the north. Asparagus rust is caused by a parasitic

fungus (Puccinia asparagi) native of the old world and was not found in America until 1896, when it was accidentially introduced in the vicinity of New York City. In ten years it had spread to all sections of the United States and in many sections caused serious damage. Sulphur-dust sprays were found to do some good in California, but little help in the East was obtained from spraying. It was learned that certain strains in Europe survived the rust attacks better than the old varieties. In 1906 the Asparagus Rust threatened to destroy the asparagus industry in Massachusetts, by killing the tops down, and as soon as next growth would come up this would be killed by rust also, until good per cent, of roots were killed. In 1906 The Massachusetts Asparagus Growers Assn. secured the cooperation of the Bureau of plant industry and the Mass. Agricultural Experiment Station in a breeding project to produce a rust resistant variety of asparagus.

Varieties of seed from all over the world were collected and planted under severe rust conditions at Concord, Mass. Not one plant was found to be completely immune to rust. This was kept up until 1910 when one male plant A7-83 from an unknown origin showed wonderful transmitting vigor and rust resistance to the progeny. A female plant B32-29 when crossed with this male gave the best progeny lot of all the hundreds of combinations. This work was kept up for a

number of years under the personal supervision of Mr. J. B. Norton, who is one of the leading plant breeders and asparagus experts of America today. About 1917 The Coker Pedigreed Seed Co., of Hartsville, S. C., who is possibly the best and largest seed breeders of the South, secured the services of Mr. J. B. Norton and a quantity of the seed he had been improving. Mr. Norton has continued breeding up the best plants and has to day the best variety of asparagus known in America "The Mary Washington." It is so much better you can not afford to plant any other variety. The Mary Washington is very early and prolific, the seed, shoots, and crowns are larger, very rust resistant, while not as rust Resistant as the Martha Washington this strain suffers no appreciable loss under severe rust conditions.. Another vary important feature is the high branching of the Mary Washington, which is very important in cutting green asparagus, especially on Mondays cutting. The older varieties will sprangle out, while the Mary Washington will hold a tight bud. The object of this experiment was to produce a variety of asparagus which growers could afford to plant commercially under severe rust conditions, while this purpose has been accomplished, it has been improved otherwise, in earliness, large straight shoots with high branching and tight bud well above the ground.

### Canning.

This is very easily done and is not so expensive as canning some other crops. The grass is taken from the field, graded if desired, the tips are cut four or six inches long, depending on the length of the can. It is then washed and placed in wire baskets, with the tips up, then carried to a pan of boiling water and boiled for ten minutes; then removed to a can of cold water, so it can be handled, then it is placed in open top cans, all the tips up, then filled with a salty brine. It is then sealed and cooked for about 20 minutes at 240 degrees. The only expensive machinery about canning grass is the sealing machine and the boiler where it is cooked.

Remember that the "latch string" hangs on the outside. Come and see what we are doing with this valuable crop and what kind of crowns you are getting. The price of my crowns is as low as they can be successfully grown. If you pay more than these prices you are paying too much; if you pay less you are getting inferior crowns. If you expect to plant asparagus another year, send me your order with 20 per cent. deposit. This will book your order and you can rest assured of getting a square deal and getting good crowns when you want them.

#### PRICE LIST OF SEED

Palmetto & Argenteuil Seed 40c per lb. Delivered by P. P.

Washington Rust Resistant 75c per lb. Delivered.

"Mary Washington" Rust Resistant \$1.50 per lb. Delivered.

Write for prices on 100 lb. lots on the above named Varieties.

#### Crowns.

Am only offering "Mary Washington" crowns, as it is the best variety known at present.

150 Select Mary W. Del. by P. P. \$2.50.

300 Select Mary W. Del. by P. P. \$3.50.

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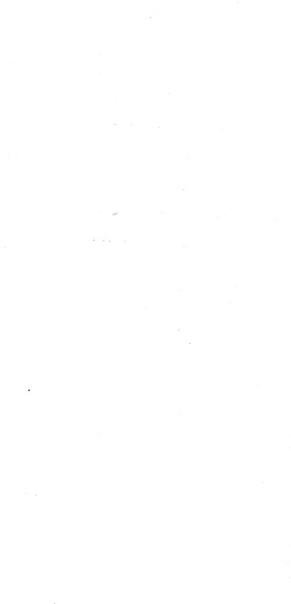
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